

The University of Chicago

THE IMPACT OF THE INDUSTRIAL
REVOLUTION UPON NEW
TESTAMENT CRITICISM

A PART OF A DISSERTATION SUBMITTED TO
THE FACULTY OF THE DIVINITY SCHOOL IN
CANDIDACY FOR THE DEGREE OF DOCTOR
OF PHILOSOPHY

1938

By
HAROLD HORTON HUTSON

Private Edition, Distributed by
THE UNIVERSITY OF CHICAGO LIBRARIES
CHICAGO, ILLINOIS

1940

The University of Chicago

THE IMPACT OF THE INDUSTRIAL
REVOLUTION UPON NEW
TESTAMENT CRITICISM

A PART OF A DISSERTATION SUBMITTED TO
THE FACULTY OF THE DIVINITY SCHOOL IN
CANDIDACY FOR THE DEGREE OF DOCTOR
OF PHILOSOPHY

1938

By
HAROLD HORTON HUTSON

Private Edition, Distributed by
THE UNIVERSITY OF CHICAGO LIBRARIES
CHICAGO, ILLINOIS

1940



THE IMPACT OF THE INDUSTRIAL REVOLUTION UPON NEW TESTAMENT CRITICISM

The Industrial Revolution represents a process of long growth, with roots reaching back scores of years before James Watt invented his steam engine. These early changes in industry were slow, but they prepared the way for later and more sweeping advances. With agriculture in transition, commerce and industry were rapidly expanding, bringing to power a strong middle class. By concentrating money and labor in the hands of the rising industrialists, the land-owning aristocracy was weakened in financial power and the way was paved for radical changes in social and political outlook. Here began the first effective challenge to the upper classes and the views which they represented, a challenge which was augmented in power by the more rapid industrial changes after 1760. The newer capitalistic groups questioned the entire plan upon which society had been operating, and brought about significant social and political readjustments. The entire concept of control and infallibility was under fire. Theology and biblical criticism had long been trying to make scriptural accounts conformable to reason; now they felt impelled to challenge the infallibility of the scriptures themselves. Thus was begun the movement to apply to documents of scripture the same tests and methods which were applied to secular writings.

Growing industry set itself against government interference and restraints on commerce. Adam Smith voiced the appeal for political and industrial freedom, maintaining the supreme value of individual liberty and arguing that man's self-love is God's providence. Beneath this cry for commercial freedom was the general philosophy of the times, the contention that men should be free to deduce their own policies of action without the external pressure of restriction and authority. The significance of this attitude for the investigation of scriptures is evident on the surface.

An observable and significant result of the Industrial Revolution was its mechanization of life, which left an indelible imprint upon men's lives and attitudes. The methods of the

natural sciences were perfected as was possible only in an age of organization. The Industrial Revolution and the economic application of science made the results of science observable. Scientific control over natural objects brought into question supernatural control. Things which had been regarded as special divine revelations were discovered to be the products of natural human development and subject to definite laws. The wonders of Jesus were interrogated with reference to scientific possibility. Men who had contacts both with applied science and with New Testament teachings began to feel sharp contrasts; they became fully conscious of the questions: "Who were Jesus and Paul? What deeds did they accomplish and how did they accomplish them?" Revolutionized industry brought more and more people into contact with science. Industrial progress was dependent upon the application of science; thousands of people were in turn dependent upon industry and its advances. Science advanced on the principle that by obeying nature one might control it through the discovery of uniform laws. The discovery and use of these laws threw doubt upon theological explanations of the natural order. The authoritarian view of the world and of the validity of scriptures found itself beset on every hand by those who claimed the right to investigate dogma and scripture in the light of related phenomena. Interest in the scientific approach and its effects upon biblical records grew with the spread of industry, for industry was the application of science and its methods to the means of production. Those who worked daily under the laws of science could not fail to see a contrast so obvious as that presented by arbitrary authority pictured in scripture records.

The application of science through the Industrial Revolution brought the inductive method of analysis and study into dominance. Advances in mechanical efficiency came not by new derivations from authoritative general concepts but by data recorded from individual experiments. The scientist will insist upon setting up postulates which will enable him to solve his problems. Science is to be tested by the success of its postulates, measured in the light of experience, observation, and any individual cases which may be studied. There is an irreconcilable conflict between dogmatic theory and scientific method: dogmatic theory insists on interpretation of individual facts in the light of an authoritative pronouncement; scientific method modifies its postulates to conform to the findings of the individual tests. In no area was this method of

science made so observably dominant as in the mechanical area, and industry was the practical application of mechanics. It is at once apparent that the spread of this inductive method into New Testament criticism would cause the removal of the dogmas of infallibility and supernatural revelation, in order that scripture might be viewed in the light of its relation to contemporary historical data and to the findings of all branches of study.

The Industrial Revolution, too, brought about the development of concepts to test comparative efficiency. Machinery first brought the need for a general concept of the unit of work, the formulation of the idea of energy, a bookkeeping conception of the physical world. A producer could then compare alternative means of production and sources of power in terms of the units of work available in each. All of this, however, depended upon the reduction of natural phenomena to basic uniformities, the postulation of a world order in which each event is determined by its relation to the others. No scientific criticism of scripture was possible until its relation to other natural events or phenomena could be determined.

The first thorough application of scientific principles to New Testament criticism occurred in the Germany of 1835, coming from the pens of David Friedrich Strauss and Ferdinand Christian Baur. Why should this occur in Germany, which was relatively undeveloped industrially, rather than in France or England, particularly the latter? In the first place, it must be noted that German criticism arose within the pale of the German university system. There the scientific biblical critic found an atmosphere conducive to exhaustive research. The spirit of the university demanded that scholarly endeavor in this sphere should adjust itself to findings in other fields, that it should proceed upon principles justified by industrial, social, political, and intellectual changes. The scholars whose influence can be seen most readily in the rise of scientific biblical criticism were university men, who by their frequent migrations diffused their methods throughout the entire university system. Although disunity and unavailability of resources hampered German economic advance, it may be asserted with confidence that the principles of scientific research developed by the Industrial Revolution in England and to a lesser degree in France found their way with great rapidity into the researches of the German university

system. That German research science had for years been committed to the principles of the Industrial Revolution was overwhelmingly demonstrated by the tremendous progress of industrial technology after the construction of the railway system and the unification of the German states had removed the last barriers to her Industrial Revolution.

In contrast to the spirit of the German university system which fostered scientific biblical criticism, note that the spirit of scientific research in France was almost exclusively confined to the French Academies, which did not embrace the field of biblical research. Church institutions alone pursued New Testament research, and since they were controlled by Roman Catholicism in the main, all conclusions were settled before research could begin. Thus biblical criticism in France was entirely without the pale of those institutes where a scientific spirit reigned.

Also in sharp contrast to the German university influence was the English ideal of a liberal education, based upon traditional and conservative notions. English scientists in almost every field worked apart from institutions. In the universities, there was little attempt to pursue scientific research in the German sense of the term. Devoted to the ideal of a liberal education, there was no effort to advance specialization in concentrated areas; departments often remained so provincial that in the first half of the nineteenth century there were repeated complaints that higher mathematics were absent at Cambridge, that no philological studies were cultivated in either of the universities, and that philosophy was represented merely by Aristotle, Butler, Locke, and Paley. The universities persistently refused to cultivate any special methods or schools of thought. In the light of these dominating ideas and tendencies it is not surprising that biblical research in the English universities fell into traditional molds and found itself decades behind German university research.

Another noteworthy contrast between German, French, and English biblical scholarship was in the matter of control exercised by ecclesiastical authority. Research in the German university system was singularly free from the dominating influence of church or state after the liberating influences of the eighteenth and early nineteenth centuries. There prevailed in the nineteenth century almost absolute freedom in the actual process of instruction

in the universities. This freedom promoted the use of scientific methods which were coming into use in other departments of the university and helped to avoid the estrangement between scientific thought and religion which was found in Roman Catholic countries or in those whose university influence was extremely conservative.

The freedom of the German biblical scholar stands in direct contrast to the rigid control exercised upon scholars in the Roman Catholic faculties of theology in France. French scientific criticism of the New Testament was almost impossible under such circumstances.

It is not to be denied that English criticism suffered from the conservative influence of the church and of the culture of which it was a part. German rationalism built upon the ruins of pietism; in England, the opposite was the case, and conservatism was still profiting from the evangelical protest against rationalism as late as the nineteenth century. Inherently conservative, the English Church was thus further strengthened in its conservatism and barricaded against free investigation of the scriptures. This attitude was forcibly demonstrated as late as 1860 by the storm which broke upon the heads of various authors represented in Essays and Reviews. Thus, not only did English university influence fail to promote scientific investigation, but the English Church acted to repulse the influence of the Industrial Revolution upon the methods of individual New Testament scholars. The New Testament scholar could not pursue his research within protecting walls such as the German university provided, nor was he free to do his work privately unless he braved the wrath of the church which supported him.

That the earliest scientific treatments of New Testament writings should appear in Germany was, therefore, not unnatural. Under her university system the scientific principles urged on by the Industrial Revolution found partial expression in the works of Semler, Lessing, Herder, Eichhorn, Gieseler, and DeWette. David F. Strauss's Das Leben Jesu and Ferdinand Christian Baur's Die Pastoralbriefe, which appeared in 1835, illustrated the first thorough application of scientific method to scriptural study. These two works adhered strictly to a scientific postulate, treating the scriptures as natural productions, exhibiting a method of critical inquiry hampered by no prescribed results, and relating their data to all contemporary phenomena.

The scientific method of Baur and his school was stoutly opposed by those who proceeded upon a more eclectic basis and by those who sought to correct his theories. In spite of these objections, the scientific method was propelled irresistibly along by the thorough Industrial Revolution which took place in the last half of the nineteenth century. In the last quarter of the century even the most ardent conservatives were forced to grant concessions to the scientific operations of men like Weizsäcker, Wernle, Pfleiderer, and Harnack. In no other way could the student of the New Testament be consistent with the currents of his age and the methods of his contemporaries in other fields.

Not until 1855, when Benjamin Jowett published his exegetical work on Thessalonians, Galatians, and Romans, did scientific principles find their partial application in an English work. Jowett's essay of 1860 contended that the Bible should be interpreted like any other book and regarded as a valuable portion of the study of history and antiquity. In the years following 1860 the pressure of the principles urged on by the Industrial Revolution gradually forced slight relaxation of factors deterrent to scientific criticism. Late in the century the work of Arnold and Hatch demonstrated that English criticism was in part converted to the scientific method. The work of Hatch demonstrated a thorough criticism of authorities and an appreciative insight into the conditions and causes of historical development. Thus even in conservative England the principles of scientific approach developed and promulgated by the Industrial Revolution proved too powerful to resist.

